

unsupported features (incomplete)

- floating point
- comments
- enums
- structs, unions
- typedef
- extern, static, register, auto keywords
- complex constant expressions (3+4 is not allowed, 3 is allowed)
- variadic functions ('...')
- old-style function declarations
- the standard library, except for getchar(), putchar(), exit()
- command line arguments (argc, argv)
- wide characters
- multiple files (only one file with main() in it)
- implicit function declaration (calling a function before it's declared)
- #define, #include, #if, etc.
- anything introduced after C90 (variable length arrays, long long int, etc.)

system

- all integers are 4 bytes. pointers are 4 bytes.
- runs on x86 32-bit mode
- compiles to netwide assembly language (NASM)

dependencies

nasm

```
sudo apt-get install nasm
```

gcc

```
sudo apt-get install gcc
```

build

```
mkdir build  
gcc src/main.c src/datastruct.c -o build/comp
```

usage

compile

type your C code in `main.c`

`build/comp main.c main.asm`

assemble

```
nasm -f elf -g -F dwarf main.asm -l main.lst  
ld -m elf_i386 -o main main.o
```

run

`./main`